

CLAIMS

1. A compressor with an electromotive swash plate, comprising:
a front housing having a front discharge chamber for discharging a firstly compressed refrigerant;
5 a rear housing having a rear suction chamber communicating with the front discharge chamber to receive the firstly compressed refrigerant and a rear discharge chamber for discharging a secondly compressed refrigerant, the rear suction chamber and the rear discharge chamber being divided by a partition;
a cylinder block disposed between the front and rear housings, the cylinder block
10 being provided with a swash plate chamber receiving the swash plate, a plurality of bores in which respective pistons are slidably installed, a discharge gas passage for assigning a refrigerant flow between the front and rear housings;
a driving shaft mounted in the cylinder block, the driving shaft being rotated by a motor received in a motor chamber formed adjacent to one of the front and rear
15 housings; and
a plurality of dual-head pistons reciprocating in the bore due to the inclination of the swash plate.
2. The compressor of claim 1, further comprising a transferring unit for
20 transferring the refrigerant introduced into the swash plate chamber to the motor chamber and a recovering unit for recovering the refrigerant from the motor chamber to the cylinder bores.
3. The compressor of claim 2, wherein the transferring unit is a transferring
25 passage formed through one of the front and rear housings to allow the swash plate chamber to communicate with the motor chamber.
4. The compressor of claim 2, wherein the recovering unit is a suction passage
30 formed adjacent to one of the front and rear housings to allow the motor chamber to communicate with the cylinder bores.

5. The compressor of claim 1, wherein the front housing further comprises a front suction chamber communicating with the swash plate chamber through a low pressure communication passage formed on the cylinder block to receive the refrigerant.

5 6. The compressor of claim 1, wherein the rear suction chamber is formed around the rear discharge chamber of the rear housing.

7. The compressor of claim 1, wherein the rear discharge chamber is provided with a discharge passage defined by a discharge pipe for reducing a discharge pressure
10 pulsation.

8. The compressor of claim 1, wherein the discharge gas passage is formed to allow the front discharge chamber to communicate with the rear suction chamber.